A NEOLITHIC SITE AT ELTON: AN EXPERIMENT IN FIELD RECORDING

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IT has been known since the earliest days of field archaeology that the Peak District was occupied at a time which is technically late neolithic-early bronze age, but which has a curious blend of round and oval burial mounds covering single and multiple burials, with cremation and inhumation traditions. Most of the visible remains are concentrated on the limestone plateau with a density which suggests that the area was a cultural centre of some standing. Their grave goods have been supplemented by numerous casual surface finds of stone axes, arrowheads and scrapers. Non-funerary pottery has rarely been recorded, although Bateman makes numerous tantalizing references to sherds found in the matrix of several barrows. Recently, there has been a little evidence forthcoming for the position of settlements, and the sort of domestic rubbish which they contained. T. G. Manby found a series of flints and sherds associated with the forecourt of the neolithic barrow called Green Low, Aldwark.[1] A similar group of flints and sherds has been found at a surface site on Calton Hill, Taddington.[2] The only other similar Derbyshire assemblage was found by A. L. Armstrong at Whaley to the east of the Peak District.[3] The slight remains from caves such as Rain's Cave are excluded here as the assemblages are usually small, and cannot be considered as the remains of typical settlements.

Field work at Elton

The absence of large earthworks, such as causewayed camps, and perhaps smaller ones due to post-enclosure ploughing, means that a new approach must be devised if we want to search systematically for neolithic occupation sites. All the known assemblages have been the by-products of other work such as barrow and cave excavation, so it was decided to examine a block of the upland limestone in great detail to try to discover whether it is possible to isolate a former occupation site, whether permanent or occasional sites could be deduced, the sort of size and richness which a site might have, and the amount of contamination from other periods.

[1] T. G. Manby, "The excavation of Green Low chambered tomb", *D.A.J.*, LXXXV (1965), 1-24.
[2] J. Radley and M. Plant, "Two neolithic sites at Taddington", *D.A.J.*, LXXXVII (1967), 149-54.
[3] J. Radley, "Excavations at a rock shelter at Whaley, Derbyshire", *D.A.J.*, LXXXVII (1967), 1-17.

In order to begin tackling these problems it is necessary to compile a detailed distribution map of surface finds in such a way that any artifact type can be isolated for study in any one restricted area.

Until recent years much of the limestone has been under permanent grass and so this kind of field work has been impossible, but recently some of this grassland has been ploughed up. The area of about 100 acres chosen for study to the south-west of Elton was selected because it had a larger proportion of its fields under plough than most adjacent areas; it is close to the neolithic barrows of Minninglow and Green Low, and there is little modern settlement and lead mining debris to confuse the issue.

The brunt of the work, several hundred hours spread over every week-end for four years, fell on Mr. L. Cooper of Chesterfield, who, with the consent of several farmers, systematically walked every plough furrow in each field several times each spring and autumn, recording every artifact by field number, and localizing it to the nearest 10 yards on a plan at a scale of 1 : 1666. The records have been summarized on fig. 2, omitting the waste fragments which have a density comparable in distribution to

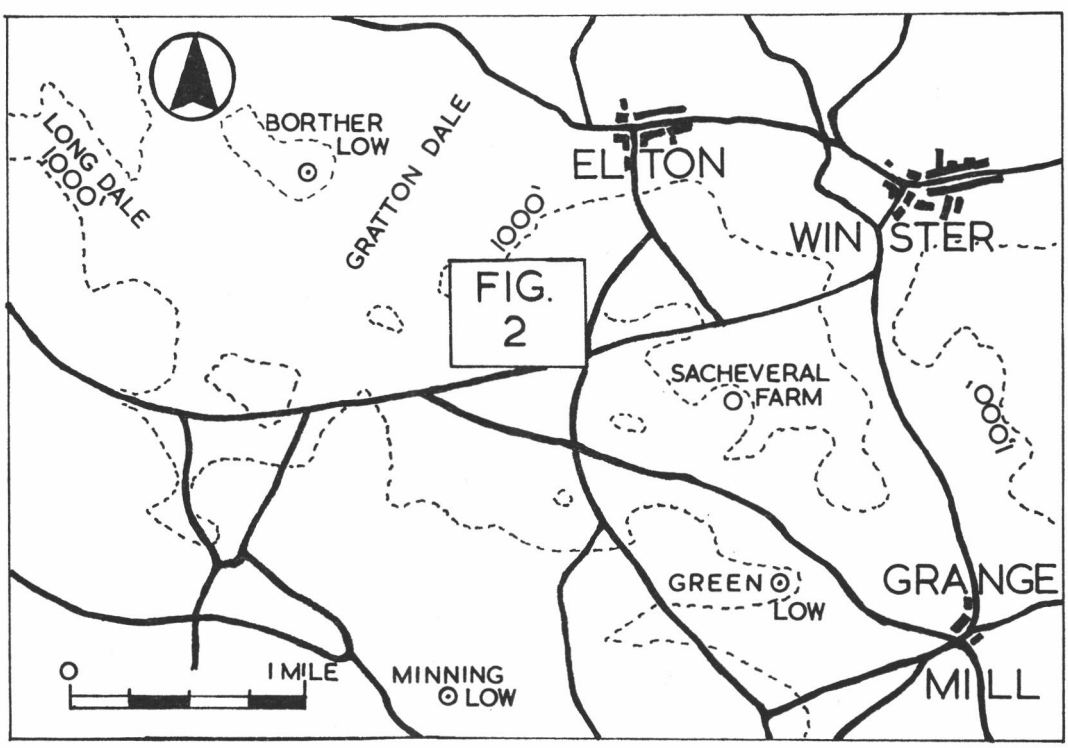

FIG. 1. Map of the Elton area.

that of the tools. Fig. 2 varies in value in different areas since some fields were only ploughed once, while others were ploughed annually. Even allowing for this, and for at least one other collector operating in the area, the project has yielded some interesting results. The distribution of the tools and an assessment based on the rate of finding artifacts in any one field suggest that the concentrations on fig. 2 are real. It is improbable that the whole area will ever be exposed all at once, so this method of field work may not be improved.

The site

Elton Common is essentially a gently undulating E.-W. ridge at about 1,000 ft. O.D. It has a sunny aspect and a shallow but fairly good soil, is well drained, and was probably covered in an open woodland dominated by elm, hazel and ash in neolithic times. Some of the dry valleys may have had permanent or intermittent streams. Minninglow and Green Low can be seen about 1½ miles to the south (fig. 1).

Fig. 2 suggests a focus of activity at field 10, and the density of tools probably indicates a permanent settlement located just below the hill top on the south-facing slope. The adjacent fields have been ploughed either once or not at all. The collection of artifacts from this field is distinctive, for of the 75 tools from the field, 32 are scrapers, and 3 are axe fragments.

In the 35 fields examined scrapers were found in 26, of which 24 yielded from 1-11, and field 7 yielded 19. This last field would appear to be another focus of settlement. The scrapers, representing the preparation of skins, are usually found near the house rather than in the fields and are thought to be women's tools. The scrapers are mostly short end scrapers, with a few round and broken ones. A number of burnt flints suggests the presence of hearths nearby. There were 15 flakes and blades with trimmed edges which could be knives, 2 awls, and a saw. Amongst the debris there were 3 cores, a mass of local black chert and some quartzite pebbles, some of which have been undoubtedly struck and used.

Perhaps two-thirds of the area has been ploughed and the opportunity to examine the fields has been adequate, but no real concentration has been found outside fields 10 and 7. Some fields have been virtually devoid of any artifacts whatsoever which places the remaining fields in a curious position. Each of 20 fields has yielded between 10 and 74 flints, and, what is more, the tool types are uniform with no suggestion of any intrusions from another area or period. It can be reasonably concluded that the flint spread represents the former area of cultivation which, allowing for unploughed fields, must have been at least 100 acres, and there is no indication that this is the limit of the area.

Fifteen pieces of broken polished greenstone axe and one piece of polished flint axe have been found in five of the fields. Nine neolithic arrowheads, both leaf-shaped and petit-tranchet derivatives, and two barb-and-tang types have been found scattered over eleven fields. Apart from the scrapers and worked tools in fields 10 and 7 there are 74 other

FIG. 2. Distribution of finds in fields at Elton.

scrapers, over 170 worked tools from these fields, and over 800 waste pieces.

Only one piece of prehistoric pottery has been recovered, from field 22. It is a reddish sherd with a dark crumbly interior with quartz grit. The sherd preserves the angle of the base forming the wall of a pot which had grooved decoration virtually down to the bottom of the pot, and two badly weathered parallel grooves survive. It probably belongs to a neolithic jar or bowl of grooved ware, or so-called Rinyo-Clacton ware.

A possible area of neolithic fields

It cannot be conclusively demonstrated that this settlement had a field-system attached to it, but three kinds of evidence exist to make it an attractive idea.

First, the very distribution of the flints may be significant; where datable they can all be placed in a late neolithic context, and they have a relatively even spread over a large area which precludes their being evidence of a number of temporary sites, all of which suggests that they were probably spread on the field in association with midden material.

Second, the broad distribution of axe fragments may mean that they were broken while clearing the land or while being used as hoes rather than axes.

Third, two tools appear to be sickle flints, probably single rather than composite tools. Fig. 3, 17 is similar in shape to those described by Curwen[4] but exhibits considerable wear though no lustre on its cutting edges, and consequently could be called a knife. However, fig. 3, 18 displays wear on its ends but also has a lustre spread along its cutting edge similar to the lustre found on tools from Calton Hill. If Witthoft is correct, the "corn gloss" is an opaline deposit on the flint, not a product of friction as is normal wear, and can only be produced by cutting grasses and not by cutting any other vegetable product.[5] In this case, there seems good reason to believe that 18 is certainly a sickle flint, and that 17 is possibly another.

It seems reasonable, therefore, to believe that this area at 1,000 ft. O.D. was under cultivation in late neolithic times, and in the absence of any evidence for a neolithic plough, a hoe culture can be assumed.

Details of the finds

An examination of the remainder of the tools and debris using a X20 illuminated binocular microscope has yielded some additional details. Fig 3, 22 shows an unworked flake, covered with cortex but heavily worn along one side as if it had been used as an unprepared scraper. Numerous scrapers show several rejuvenations and a worn final edge. Presumably there was a frequent re-using of tools so that the relatively low total of finds for the site may not be very significant.

[4] E. Curwen, "Non-crescentic sickle-flints from Susses", *Ant. J.*, XVI, no. 1, January 1936, 85-90.
[5] J. Witthoft, "Glazed polish on flint tools", *American Antiquity*, 32, no. 3, July 1967, 383-8.

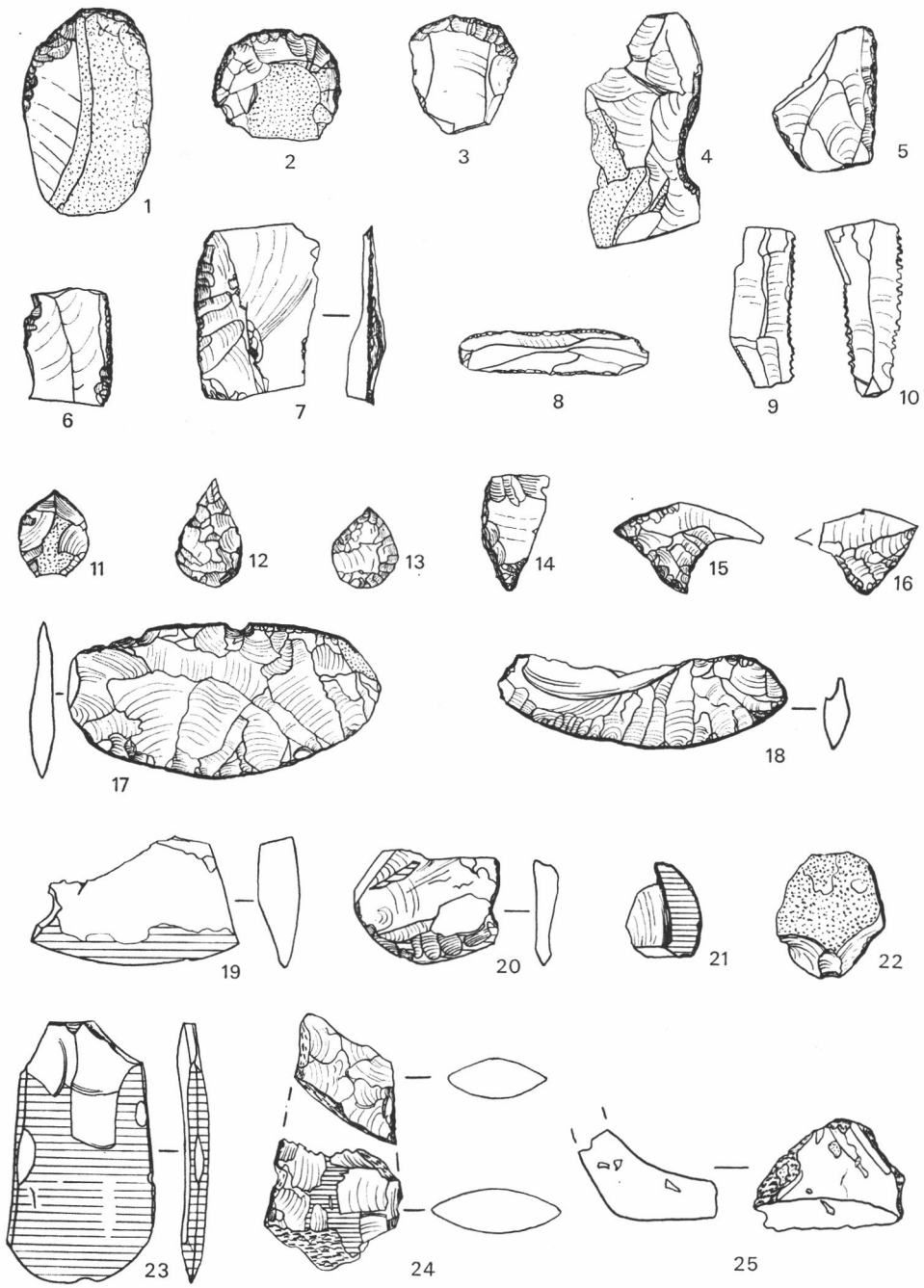

FIG. 3. Implements from Elton Common: 1-4 scrapers, 5-8 knives, 9-10 saws, 11-16 arrowheads, 17-18 sickles, 19-20, 23-24 polished knives or chisels (1/1).

Polish is indicated by horizontal shading, wear and lustre by blackening of the appropriate edges of nos. 17, 18 and 22.

Several flakes have notches of varying sizes worked into them. There are at least fifteen serrated flakes, some showing wear. Of the numerous large quartzite pebbles found on the site, the largest weighing 2 lb. 4 oz., only a few show percussion marks concentrated on one end, or facetted patches produced by rubbing. There are three typical "fabricators" each with one worn end. Several large flakes show secondary bifacial flaking, often producing an artifact which has no apparent function, but none can be placed in the "laurel-leaf" class.

There are several artifacts from the site which are probably unrelated to the main occupation. Flints from the site are usually unpatinated, but there are about a dozen blades and three microliths which have a white-blue patination. These are concentrated on the western part of the site and suggest a mesolithic origin. Black chert is natural to the area, and the forty struck pieces which have been recovered are most probably part of the main assemblage.

Several of the materials on the site imply trade over considerable distances. The axes are made from a pale green volcanic rock; a typical piece was petrologically examined and proved to be from the Langdale axe factory. The flint, including two large nodules weighing 22 and 12 oz., is essentially beach flint from the east coast. Perhaps the most interesting fragment is the axe or knife blade (fig. 3, 19), apparently made of the fine-grained yellow quartzite, which occurs in Devon, was formerly used to make palaeolithic hand-axes in the Axe valley, and is locally called "chert".

Conclusion

The assemblage is a flake industry rather than a blade industry and can be said to be generally datable to the later part of the neolithic or the early part of the bronze age. No absolute date can be offered since the components of the site are not sufficiently diagnostic, and there are no C.14 dates for the period.

Southern sites throughout the neolithic use serrated flakes, scrapers, awls, arrowheads, axes, and knives similar to those found at Elton. Some of the stone axes, fabricators and barb-and-tang arrowheads place the Elton assemblage in a late rather than an early category, and the single pot sherd — tentatively recognized as part of a grooved ware vessel — would point to a similar conclusion.

Four other smaller concentrations of neolithic remains have been recovered in the same neighbourhood; Manby excavated a similar group of finds from Green Low,[6] and another similar group was found at Calton Hill. These are tabulated below:

[6] Manby, 1965, 11-4.

Finds	Elton	Near Minninglow	Bonsall Moor	Sacheverell Farm	Mouldridge Grange	Calton Hill	Green Low
Axes, stone	17	1	1	1	—	28	2
flint	1	—	—	—	2	1	—
Used flakes	256	8	9	4	5	33	3
Serrated flakes	15	—	2	—	—	3	—
Awl	—	—	1	—	—	—	—
Scrapers	132	10	5	2	3	44	1
Sickle flints	1	—	—	—	—	2	—
Fabricator	1	—	—	—	—	—	—
Burnt pieces	240	18	2	4	5	61	—
Pieces of pottery	1	—	—	—	—	13	33+
Debris	800	69	58	27	32	455	23

Half a mile north of Minninglow (SK 208581) a ploughed field at 1100 ft. O.D. has yielded a range of material comparable to that from Elton, a mile to the north. Four fields, in the midst of an otherwise empty area, have yielded remains at 950 ft. O.D. on Bonsall Moor (SK 245590). The summit field at 1,000 ft. O.D. west of Sacheverell Farm (SK 222591), and a field west of Mouldridge Grange at 1,000 ft. (SK 196593) have small sites. These and Green Low all occupy an area of five square miles on the high limestone plateau between Winster and Pike Low. The five sites add nothing to the Elton stone industry, and are clearly in the same tradition. It is disconcerting that no bone has been recovered from these sites, but this is presumably due to the acidity of the surface levels in the soil, though at Green Low animal bones have survived, chiefly pig, ox and goat or sheep.

Only broad dating evidence exists. From Elton and Green Low, axes have been sectioned and prove to be of group IV. Virtually all these axes from the sites tabulated above appear macroscopically to be from the same rock, which was exploited as an axe factory from mid-neolithic times. At Calton Hill, maggot-decorated Peterborough ware was found with grooved ware. This grooved ware was found at Elton, and a similar base sherd was found at Green Low,[7] together with other pieces of grooved ware, plain ware, and beaker. These wares occurred also at Whaley, and it appears that the grooved ware is the unifying factor in the pottery from all these sites. Finally, from the same area one other barrow can be mentioned. This is an unlocated barrow on Elton Common excavated by Bateman[8] which contained two burials. One was accompanied by a beaker which held twenty-one scrapers, seventeen pieces of flint, a small axe with a rounded cutting edge, three pebbles and a flat piece of iron ore. The small axe is exactly paralleled by a surface find of a small flint

[7] Manby, 1965, 12-3, fig. 6, 8.
[8] T. Bateman, *Ten years' diggings*, 1861, 53-4.

axe from Elton Common (SK 213596), unpublished, in the hands of the finder, Mr. B. Cliff of Stoke-on-Trent. The rounded cutting edge is a curious feature paralleled at Whaley.[9] Thus in the vicinity of Elton Common-Green Low-Minninglow, there is a considerable unity in the cultural remains which may cover a lengthy period where grooved wares and beakers overlap. There is, at the present time, a marked lack of early neolithic remains in the area, and it may well be that these small occupation sites, perhaps of small family groups practising hunting, herding and farming, are part of the initial flowering of the cultural group which culminated in what has been called the Peak culture of the early bronze age.

Inventory of finds

Field	Sherd	Axe pieces	Arrow-head	Scrapers	Worked	Burnt	Debris
1	—	—	—	1	2	9	10
2	—	—	—	—	—	—	—
3	—	—	—	2	1	—	1
4	—	—	—	1	—	3	10
5	—	—	—	—	—	—	—
6	—	—	1	3	2	9	12
7	—	—	1	19	6	9	53
8	—	—	1	12	3	23	36
9	—	—	—	4	3	6	30
10	—	3	1	32	13	42	122
11	—	—	1	4	2	3	6
12	—	4	—	5	3	22	49
13	—	—	1	9	6	14	6
14	—	—	—	—	—	—	—
15	—	—	1	3	3	3	21
16	—	—	—	—	—	—	4
17	—	1	—	1	—	3	2
18	—	3	—	6	12	12	46
19	—	—	1	9	2	6	48
20	—	—	—	—	2	15	40
21	—	—	—	1	—	4	34
22	1	—	—	1	5	2	35
23	—	—	—	—	—	2	9
24	—	3	1	2	4	22	53
25	—	1	1	4	2	8	36
26	—	—	—	—	—	1	7
27	—	—	—	—	—	1	3
Other fields	—	—	—	5	4	8	18
	—	—	1	1	3	6	27
	—	3	—	4	3	14	45
	—	—	—	3	2	3	10

[9] Radley, 1967, fig. 5, 14.

There remains the obvious question of excavation. The writers believe that any settlement in or adjacent to the upper part of field 10 has been largely ploughed away. It is hoped that pits, working hollows or post-holes might exist, but since the nucleus of remains covers 1½ acres this excavation will be a long-term project. Efforts made in the last three years to locate new areas of restricted flint distributions have met with limited success. After many scores of man-days spent in field work in the Elton-Pikehall area it has been concluded that Elton Common has the best prospects of yielding structural and cultural remains.

Acknowledgements

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